

REMARKS

As a preliminary matter, the title of the specification is objected to as allegedly not being descriptive. Applicants amend the title, as indicated herein, and believe that this change obviates the Examiner's objection to the title.

Also, as a preliminary matter, claims 2, 4, and 19 are objected to as allegedly being of improper dependent form for failing to further limit the subject matter of a previous claim. Further, the Examiner states that he/she cannot determine what number the defective cells need to exceed. Applicants amend claims 2, 4, 19, as indicated herein, and Applicants believe that these amendments obviate the Examiner's objections to claims 2, 4, and 19.

Claims 1-24 are all the claims pending in the present application. Claims 9, 10, 13, 14, 22, and 23 contain allowable subject matter and would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Claims 3, 5, 6, 15, and 16 are rejected under 35 U.S.C. § 112, second paragraph, as allegedly being indefinite. Claims 1-5, 7, 11, 12, and 18-21 are rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by Sasaki et al. (U.S. Patent No. 4,942,556). Claims 6, 8, 17, and 24 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Sasaki in view of Cloud et al. (U.S. Patent No. 6,199,251).

§ 112, Second Paragraph, Rejections - Claims 3, 5, 6, 15, and 16

Claims 3, 5, 6, 15, and 16 are rejected under 35 U.S.C. § 112, second paragraph, for the reasons set forth on page 3 of the present Office Action. Applicants amend claims 3, 5, 6, and

15¹ for clarification purposes, and Applicants believe that these amendments obviate the Examiner's rejections of claims 3, 5, 6, 15, and 16 under 35 U.S.C. § 112, second paragraph.

§ 102(b) Rejections (Sasaki) - Claims 1-5, 7, 11, 12, and 18-21

Claims 1-5, 7, 11, 12, and 18-21 are rejected over Sasaki for the reasons set forth on pages 3-5 of the present Office Action.

With respect to independent claim 1, the Examiner rejects this claim for the same reasons that claims 3, 5, and 7 are rejected. *See page 5 of Office Action.* Applicants submit, however, that Sasaki does not teach or suggest at least, “storing defect information, obtained as a result of the checking, in a memory controller when the checking of all of the cells of the memory is over,” as recited in claim 1. The Examiner does not even mention the above-underlined limitation set forth in operation (b) of step 1. Further, nowhere does Sasaki disclose the above-quoted limitation. Therefore, at least based on the foregoing, Applicants submit that independent claim 1 is patentably distinguishable over Sasaki. Applicants submit that independent claim 18 is patentable at least for reasons similar to those set above with respect to claim 1.

Applicants submit that dependent claims 2, 11, 12, and 19-21 are patentable at least by virtue of their respective dependencies from independent claims 1 and 18.

Further, with respect to claims 2 and 19, Applicants submit that Sasaki does not teach or suggest at least, “generating a request for replacing the memory with a new memory when a number of the defective cells in the memory exceeds a predetermined number,” as recited in claims 2 and 19. The Examiner does not even address this particular limitation and, there is no

¹ Applicants also amend claims 7-9, 12, 13, 17, 21, 22, and 24 for clarification purposes.

teaching of this specific limitation in Sasaki. Applicants submit that claim 4 is patentable at least for similar reasons.

Further, with respect to claims 11 and 20, the Examiner does not even address the features set forth in these claims, and, Sasaki does not disclose these features.

Further, Applicants submit that Sasaki's patent relates to a method for restoring defects in a memory device, performed inside of the memory device by the memory device itself. In contrast, the present invention relates to the restoration of defects in a memory device performed by a separate device located outside of the memory device. Such is evident by the limitations of each of claims 1-5, 7, 11, 12, and 18-21. Therefore, at least based on the foregoing, Applicants submit that Sasaki does not anticipate the subject matter of claims 1-5, 7, 11, 12, and 18-21.

Yet even further, with respect to claims 1, 3, and 18, Applicants submit that the prior art does not teach or suggest at least, "checking all cells of a memory to determine whether the memory is defective at an operation start time," as recited in independent claim 1 and similarly recited in claims 3 and 18.

Also, with further respect to claims 5, 7, 12, and 21, Applicants submit that the prior art does not teach or suggest at least, "replaces said at least one defective cell in the memory with the second data registers," as recited in claim 5 and similarly recited in claims 7, 12, and 21.

§ 103 Rejections (Sasaki/Cloud) - Claims 6, 8, 17, and 24

Claims 6, 8, 17, and 24 are rejected for the reasons set forth on pages 5-6 of the present Office Action. Specifically, the Examiner alleges that Sasaki teaches all of the claimed subject matter except the Examiner acknowledges that Sasaki does not disclose the specific features set forth in claims 6, 8, 17, and 24. The Examiner, however, believes that Cloud satisfies the

specific features set forth in claims 6, 8, 17, and 24. Applicants traverse these rejections at based on the following reasons.

First, Applicants submit that dependent claims 6, 8, 17 and 24 are patentable at least by virtue of their dependencies from claims 1 and 18, respectively. Cloud does not make up for the deficiencies of Sasaki.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

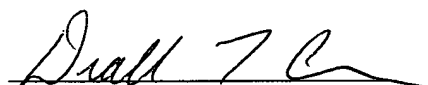
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